

Material Safety Data Sheet

Copyright, 2003, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) General Purpose Spray Adhesive 45

MANUFACTURER: 3M

DIVISION: Industrial Adhesives and Tapes

ADDRESS: 3M Center

St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 06/08/2003 Supercedes Date: 10/02/2002

Document Group: 18-1348-4

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
NONVOLATILE COMPONENTS N.J. TRADE SECRET REGISTRY NO.	Trade Secret	20 - 30
04499600-6503		
ACETONE	67 - 64-1	20 - 30
PROPANE	74-98-6	15 - 25
2-METHYLPENTANE	107-83-5	10 - 20
3-METHYLPENTANE	96-14-0	3 - 7
CYCLOHEXANE	110-82-7	3 - 7
2,2-DIMETHYLBUTANE	75-83-2	1 - 5
2,3-DIMETHYLBUTANE	79-29-8	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Aerosol

Odor, Color, Grade: clear, sweet fruity odor

General Physical Form: Gas

3M MATERIAL SAFETY DATA SHEET 3M(TM) General Purpose Spray Adhesive 45 06/08/2003

Immediate health, physical, and environmental hazards: Closed containers exposed to heat from fire may build pressure and explode. Aerosol container contains flammable material under pressure. Aerosol container contains flammable gas under pressure. Flammable liquefied gas.

May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

May be absorbed through skin and cause target organ effects.

Prolonged or repeated exposure may cause:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Inhalation:

Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May be absorbed following inhalation and cause target organ effects.

Intentional concentration and inhalation may be harmful or fatal.

Ingestion:

May be absorbed following ingestion and cause target organ effects.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.

Target Organ Effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause:

Peripheral Neuropathy: Signs/symptoms may include tingling or numbness of the extremities, incoordination, weakness of the hands and feet, tremors and muscle atrophy.

Kidney Effects: Signs/symptoms may include reduced or absent urine production, increased serum creatinine, lower back pain, increased protein in urine, and increased blood urea nitrogen (BUN).

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

3M MATERIAL SAFETY DATA SHEET 3M(TM) General Purpose	Spray	Adhesive 45	06/08/2003

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature No Data Available

Flash Point -42 °F [Test Method: Tagliabue Closed Cup]

Flammable Limits - LEL No Data Available
Flammable Limits - UEL No Data Available

OSHA Flammability Classification: Class IA Flammable Liquid

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

Unusual Fire and Explosion Hazards: Closed containers exposed to heat from fire may build pressure and explode. Aerosol container contains flammable material under pressure. Flammable liquefied gas.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-\$00-364-3577) for more information

Page	2 6	nf	Q
rage	<i>J</i>	<i>J</i> 1	U

3M MATERIAL SAFETY DATA SHEET 3M(TM) General Purpose Spray Adhesive 45 06/08/2003

on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact with vapors, mists, or spray. Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Aerosol container contains flammable gas under pressure. No smoking while handling this material. Do not spray near flames or sources of ignition. Do not pierce or burn container, even after use. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Keep out of the reach of children.

7.2 STORAGE

Store away from heat. Store away from acids. Store out of direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with functioning spray booth or local exhaust. Use with appropriate local exhaust ventilation. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray. Avoid eye contact.

The following eye protection(s) are recommended: Safety Glasses with side shields.

8.2.2 Skin Protection

Avoid prolonged or repeated skin contact. Gloves not normally required. Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

8.2.3 Respiratory Protection

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

Ingredient	Authority	<u>Type</u>	<u>Limit</u>	Additional Information
ACETONE	ACGIH	TWA	500 ppm	Table A4
ACETONE	ACGIH	STEL	750 ppm	Table A4
ACETONE	OSHA	TWA,	750 ppm	
		Vacated		
ACETONE	OSHA	TWA	1000 ppm	Table Z-I
ACETONE	OSHA	STEL,	1000 ppm	
		Vacated		
CYCLOHEXANE	ACGIH	TWA	100 ppm	
CYCLOHEXANE	OSHA	TWA	300 ppm	Table Z-I
HEXANE (ISOMERS OTHER THAN N-	ACGIH	TWA	500 ppm	
HEXANE)				
HEXANE (ISOMERS OTHER THAN N-	ACGIH	STEL	1000 ppm	
HEXANE)				
PROPANE	ACGIH	TWA	2500 ppm	
PROPANE	OSHA	TWA	1000 ppm	Table Z-1

VAC Vacated PEL:Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AlHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: Aerosol

Odor, Color, Grade: clear, sweet fruity odor

General Physical Form: Gas

Autoignition temperature No Data Available

Flash Point -42 °F [Test Method: Tagliabue Glosed Cup]

Flammable Limits - LEL

Flammable Limits - UEL

No Data Available

No Data Available

No Data Available

No Applicable

Vapor Density 2.97 [Ref Std: AIR=1]

Specific Gravity 0.745 [Ref Std: WATER=1]

pH No Data Available
Melting point No Data Available

Solubility in Water Nil

Evaporation rate 1.90 [Ref Std: ETHER=1]

Hazardous Air Pollutants <= 1 % weight [Test Method: Calculated]

Volatile Organic Compounds52 % weightPercent volatile78 % weightViscosityNot Applicable

SECTION 10: STABILITY AND REACTIVITY

3M MATERIAL SAFETY DATA SHEET 3M(TM) General Purpose Spray Adhesive 45 06/08/2003

Stability: Stable.

Materials and Conditions to Avoid: Heat

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance

Condition

Aldehydes Hydrocarbons Carbon monoxide Carbon dioxide During Combustion During Combustion During Combustion During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

CHEMICAL FATE INFORMATION

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

Facility must be capable of handling aerosol cans. The facility should be equipped to handle gaseous waste. RECYCLE EMPTY AEROSOL CONTAINERS WHERE AVAILABLE.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

ID Number(s):

1	. SECTION AND A CHIEFE	284/2084) C	Direction Company Adhasina A	5 N&/NO/7/MY
1 2M MAATERIAL SA	ARRIV DATA SHEFT	AMICI MIDA LEBERAL R	Purpose Spray Adhesive 4	2 00/00/2003

62-4941-4825-7

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	% by Wt
CYCLOHEXANE	110-82-7	3 - 7

This material contains a chemical which requires export notification under TSCA Section 12[b]:

Ingredient (Category if applicable)	C.A.S. No	Regulation	Status
CYCLOHEXANE	110-82-7	Toxic Substances Control Act (TSCA) 4 Test	Applicable
ACETONE	67-64-1	Rule Chemicals Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals	Applicable

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

WHMIS: Hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910,1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 4 Reactivity: 0 Special Hazards: None

Aerosol Storage Code: 3

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes:

Section 1: Product name was modified.

Section 1: Division name was modified.

Copyright was modified.

Section 2: Ingredient information was modified.

Section 1: Product name was modified.

Section 15: EPCRA 313 information was modified.

Section 8: Exposure guidelines information was modified.

Section 9: Property description was modified.

Section 9: Specific gravity information was modified.

Section 15: TSCA section 12[b] information was modified.

Section 12: Ecotoxicological information was deleted.

Section 8: Exposure guideline note was deleted.

Section 12: Ecotoxicological information was deleted.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

3M MSDSs are available at www.3M.com